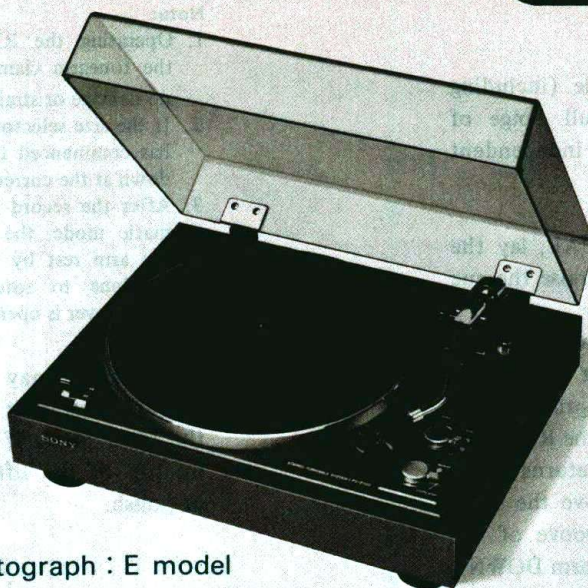


PS-2700

US Model
Canadian Model
E Model
AEP Model



Photograph : E model

AUTOMATIC STEREO TURNTABLE SYSTEM

SPECIFICATIONS

GENERAL

Power Requirement:	110, 120, 220 or 240 V ac, 50/60 Hz (E, AEP model) 120V ac, 60Hz (US and Canadian model)
Power Consumption:	10W (E model) 12W (US, Canadian model) 18W (AEP model)
Dimensions:	455 (w) x 160 (h) x 370 (d) mm 18 (w) x 6 ³ / ₈ (h) x 14 ⁵ / ₈ (d) inches
Weight:	Approx. 8kg, 17 lb 10oz (net) Approx. 10.5kg, 23 lb 2 oz (with shipping carton)

TURNTABLE

Platter:	30cm (12 inches), diecasting aluminum alloy
Drive System:	belt drive
Speeds:	33 ¹ / ₃ , 45 rpm
Wow and Flutter:	± 0.08% (DIN 45507, weighted) Less than 0.06% (NAB, weighted rms)
S/N Ratio:	Greater than 63dB (DIN 45539, B-curve weighted)

TONEARM

Type:	Statically balanced, universal
Arm Length:	300mm (11 ⁷ / ₈ inches), overall 216.5mm (8 ¹ / ₂ inches), pivot-to-stylus
Overhang:	16.5mm (² / ₃₂ inches)
Tracking Error:	+3°, -1°
Tracking-force Adjustment	
Range:	0 - 3g
Shell Weight:	7.5g
Cartridge Weight Range:	4 - 10g

CARTRIDGE (VL-32G) (Canadian, E, AEP model)

Type:	Moving magnet type
Output Voltage:	4mV at 1kHz, 5cm/s
Load Impedance:	50k ohms
Tracking Force:	2g
Stylus:	Conical 0.5 mil diamond (ND-134G)
Weight:	5.5g

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SONY®

SERVICE MANUAL

MODEL IDENTIFICATION

– Specification Label –

US, Canadian model

SONY [®]	STEREO TURNTABLE SYSTEM
	MODEL NO. PS-2700
	AC 120V 60Hz 12W
	SERIAL NO. _____
	MADE IN _____

E model

SONY [®]	STEREO TURNTABLE SYSTEM
	MODEL NO. PS-2700
	AC 110, 120, 220, 240V 50/60Hz 10W
	SERIAL NO. _____
	MADE IN _____

AEP model

SONY [®]	STEREO TURNTABLE SYSTEM
	MODEL NO. PS-2700
	~ 110, 120, 220, 240V 50/60Hz 18W
	SERIAL NO. _____
	MADE IN JAPAN

SECTION 1
OUTLINE

MEMO

Lined area for notes with horizontal dashed lines.

1.1 OPERATING EXPLANATION

The PS-2700 fully automatic turntable (including manual operation) incorporates a full range of feature such as a separate power switch independent of the tonearm movement.

• Manual operation

Set the size selector lever to MANUAL, lay the record on the turntable platter, and raise the cue lever (tonearm UP).

Pull the REPEAT, START/STOP lever forward, and then release your finger. After the record has started to rotate, select the appropriate record speed with the speed selector lever. The REPEAT, START/STOP lever consequently returns automatically to its original position. Move the tonearm across to above the lead-in groove of the record, and lower the cue lever (tonearm DOWN). Return of the tonearm to the arm rest is completely automatic.

Note:

1. The turntable will not rotate without operating the REPEAT, START/STOP lever, even if the size selector lever is switched to the MANUAL position, and the tonearm moved across to the record. (The power switch is independent of tonearm movement).
2. The turntable continues to rotate even after the tonearm has returned to the arm rest. To stop turntable, pull the REPEAT, START/STOP lever forward again.
3. If the REPEAT, START/STOP lever is not released straight away at the beginning of play, the tonearm will automatically return to the arm rest soon after it has been lowered onto the record.

• Full automatic operation

If the record speed needs to be changed, first operate the REPEAT, START/STOP lever with the size selector in the MANUAL position. After changing the speed, pull the REPEAT, START/STOP lever again to stop turntable rotation. Then select the appropriate record size by moving the size selector lever from the MANUAL position to the 30, 25, or 17cm (12, 10 or 7 inches) disk position. Now lay the record on the turntable platter, release the arm rest clamp, and pull the REPEAT, START/STOP lever again (remembering that the lever has to be released almost immediately). The tonearm then moves across to the record, descends onto the lead-in groove, and returns to the arm rest after the end of play, completely automatically.

Note:

1. Operating the REPEAT, START/STOP lever with the tonearm clamped down in the arm rest, causes no damage or strain whatsoever.
2. If the size selector lever is operated after the tonearm has commenced to move, the tonearm will not come down at the correct position.
3. After the record has started to play in the full automatic mode, the tonearm may still be returned to the arm rest by hand. The turntable, however, will continue to rotate until the REPEAT, START/STOP lever is operated once again.

The tonearm may sometimes not return as far as the arm rest if it does not slide properly across the lifter plate. If this happens, clean the rubber on top of the lifter plate with a small amount of polish.

1-2. ADAPTATION TO LOCAL POWER LINE FREQUENCY (E Model only)

The turntable can be adapted to operate at another power-line frequency by changing the motor pulley.

1. Remove the pulley by loosening the set screw securing it to the shaft with a screwdriver.

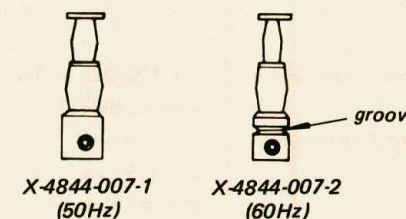


Fig. 1-1

2. Change the motor pulley to the useable one.
3. Adjust the pulley height so that the top of the motor pulley should be in line with the drive belt shifter (33 rpm position) as shown below.

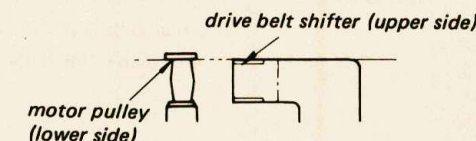


Fig. 1-2

SECTION 2 DISASSEMBLY

WARNING

Unplug the ac power cord before starting any dis-assembly or replacement procedures.

2-1. TOP COVER REMOVAL

1. Open the top cover, and then pull it up as shown in Fig. 2-1.

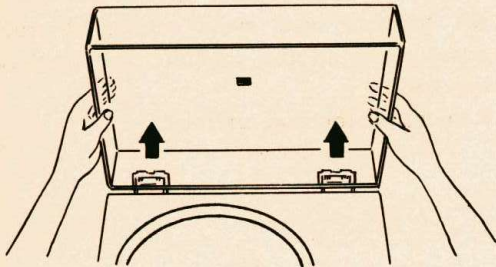


Fig. 2-1

2-2. TURNTABLE PLATTER REMOVAL

1. Remove the turntable platter mat from the turntable platter.
2. Turn the turntable platter so that the either hole of the turntable platter is on the motor pulley.
3. Remove the drive belt and then lift the turntable straight up.

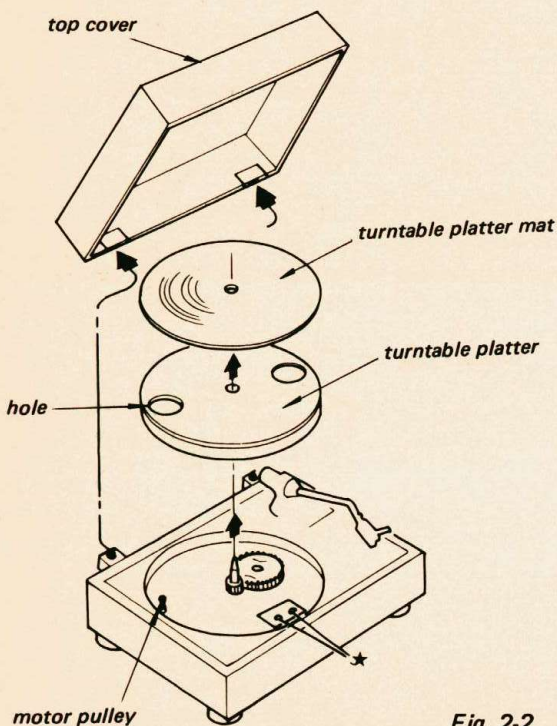


Fig. 2-2

Note:

The motor mechanism is locked by two red-painted transit screws. When operating the player, remove two screws and keep it in the place marked * in Fig. 2-2.

2-3. BOTTOM PLATE REMOVAL

1. Remove the turntable platter. Don't remove the top cover.
2. Put and lock the tonearm on the tonearm rest.
3. Place the set up-side-down.
4. Remove four feet and ten tapping-screws as shown in Fig. 2-3.

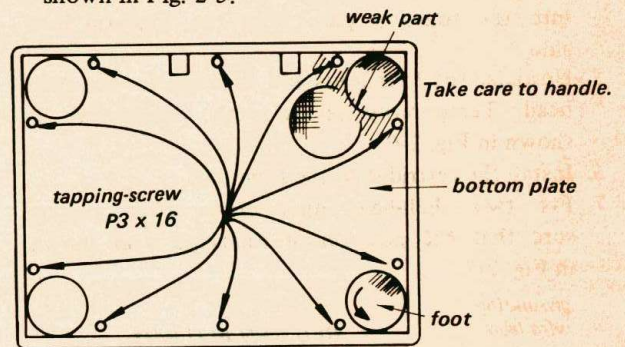


Fig. 2-3

2-4. CASE REMOVAL

1. Remove the bottom plate as described in Procedure 2-3.
2. Remove four screws and pull the cord holder off as shown in Fig. 2-4.

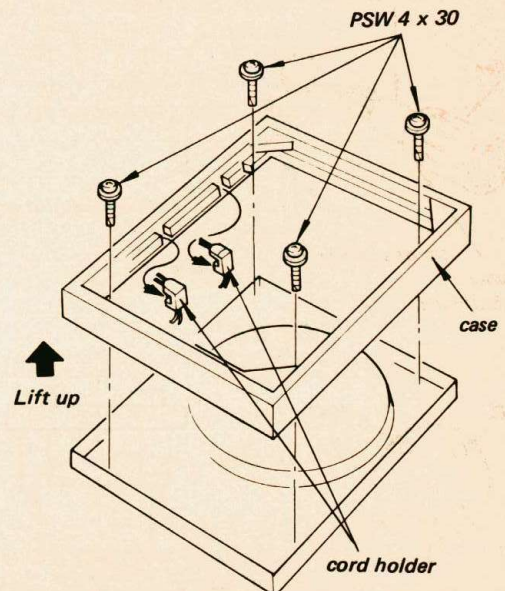


Fig. 2-4

2-5. SHELL HEAD REMOVAL

Note:
The four lead wires for shell head difficults to pass through the tonearm pipe. Thus, use the former lead wires when replacing the shell head.

1. Unsolder the output leads from the tonearm on the terminal board as shown in Fig. 2-5.
2. Remove the bottom plate and the turntable platter.
3. Remove two shell-head-adjust-screws as shown in Fig. 2-6.
4. Pull out the shell head connector about 3cm (1 3/16 inches) slowly while pushing the four leads into the tonearm pipe from the tonearm base side.
5. Unsolder the four leads and then replace the shell head. Temporarily secure with two screws as shown in Fig. 2-6.
6. Install the cartridge to the tonearm.
7. Fix two shell-head-adjust-screws after making sure that the position of cartridge is as shown in Fig. 2-7.

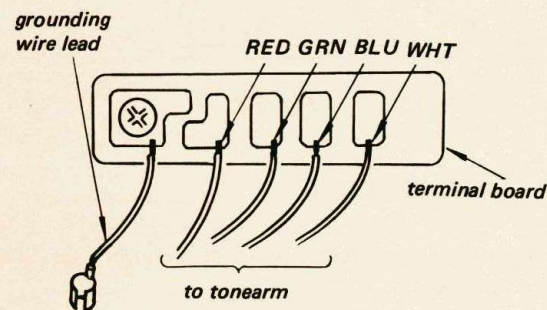


Fig. 2-5

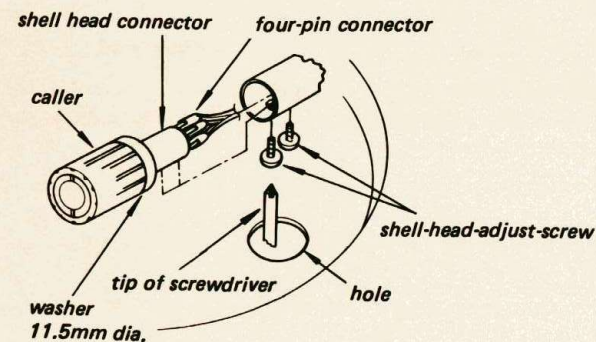


Fig. 2-6

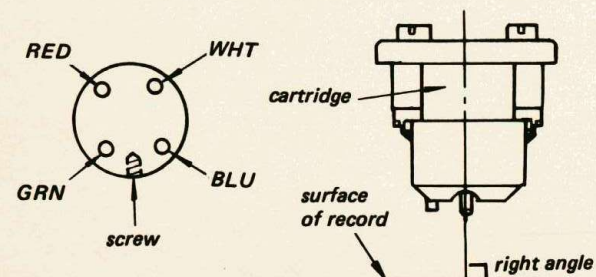


Fig. 2-7

2-6. TONEARM REMOVAL

1. Remove the top cover, the shell head, the counterweight, the turntable platter, the bottom plate and the case.
2. Unsolder the leads from the tonearm on the terminal.
3. Pull out the grounding wire as shown in Fig. 2-8.
4. Loosen two hexagonal screws, then remove the brake drum as shown in Fig. 2-8.
5. Remove three hexagonal screws, then draw out the tonearm base while turning it clockwise about 2mm on the circumference as shown in Fig. 2-9.
6. Remove the tonearm carefully.

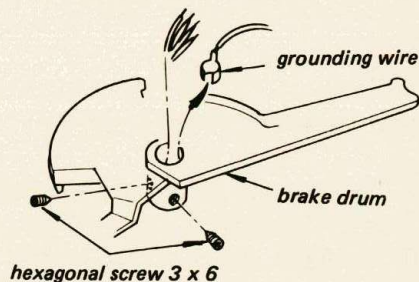


Fig. 2-8

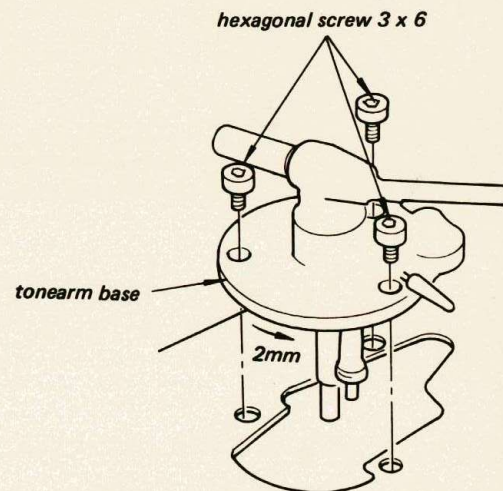


Fig. 2-9

2-7. TONEARM PIPE REMOVAL

1. Remove the tonearm as described in Procedure 2-6.
2. Remove the 12mm dia. retaining ring for taking off the tonearm as shown in Fig. 2-10.
3. Replace the pipe, the rubber for pipe and the connector as shown in Fig. 2-11.
4. Temporarily secure the pipe with two hexagonal screws and the screw B2.6 x 6 as shown in Fig. 2-11.
5. After replacing the new arm pipe, install the tonearm so that the three portions of A, B and C keep the same height as shown in Fig. 2-12.
6. Remove the tonearm again from the tonearm base. Fix two hexagonal screws and the screw B2.6 x 6.

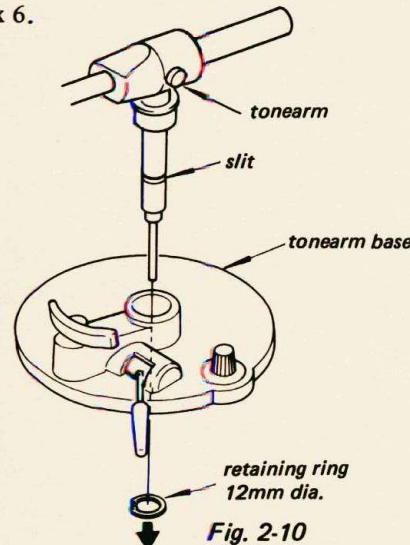


Fig. 2-10

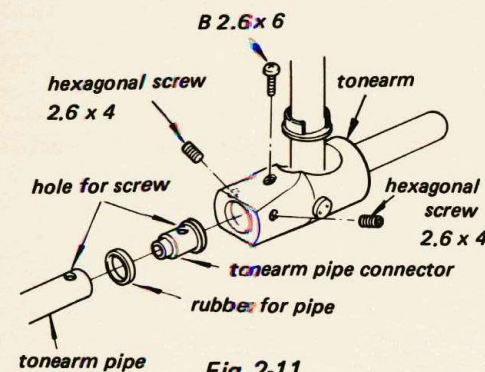


Fig. 2-11

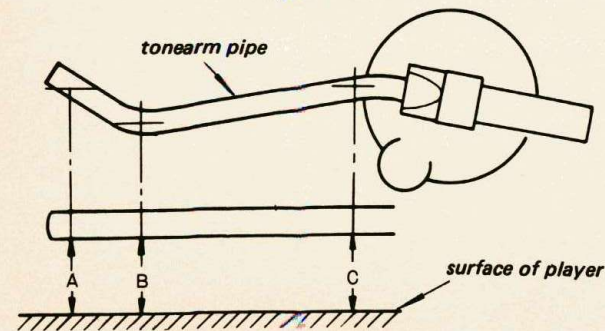


Fig. 2-12

2-8. COUNTERWEIGHT SHAFT REMOVAL

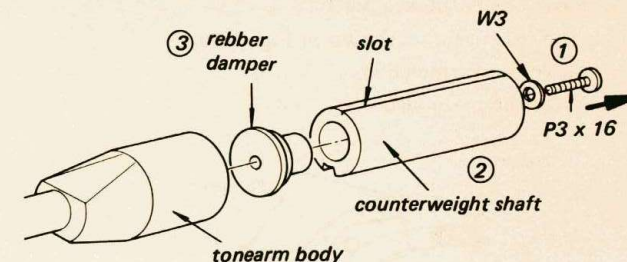


Fig. 2-13

Note: Install the shaft slot-side-up certainly.

2-9. LATERAL BALANCER REMOVAL

Loosen the lateral balance nut at first, and then remove the lateral balance shaft.

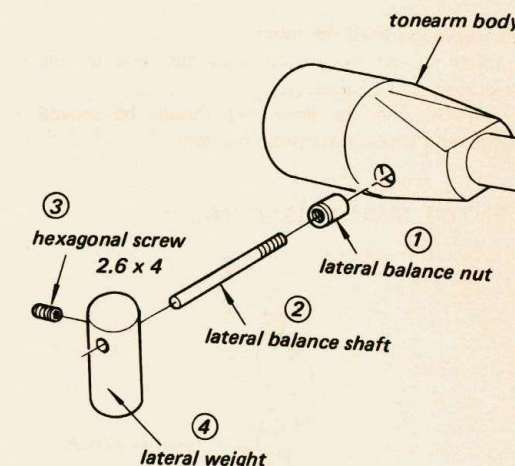


Fig. 2-14

Note:
The lateral balance shaft should be jut out a few inches from the lateral weight. Also, keep the lateral weight right angle against the tonearm body as shown below.

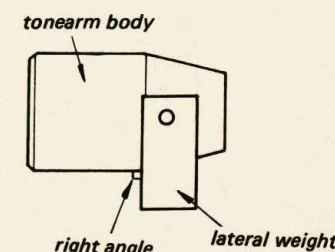
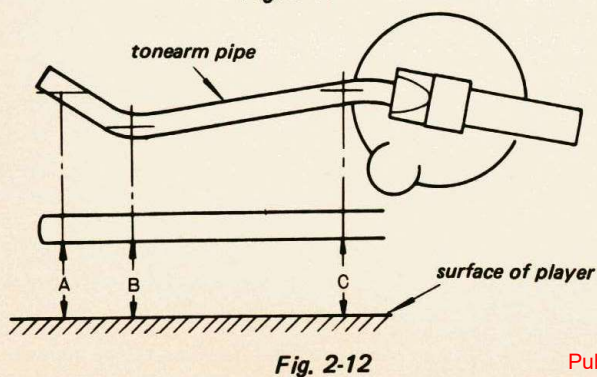
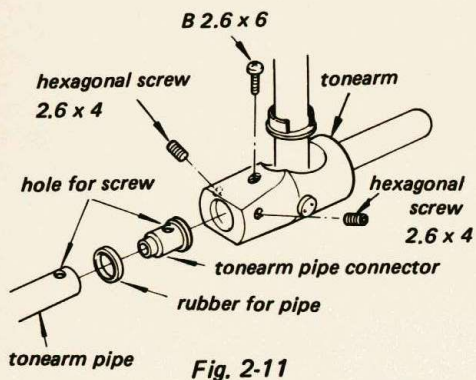
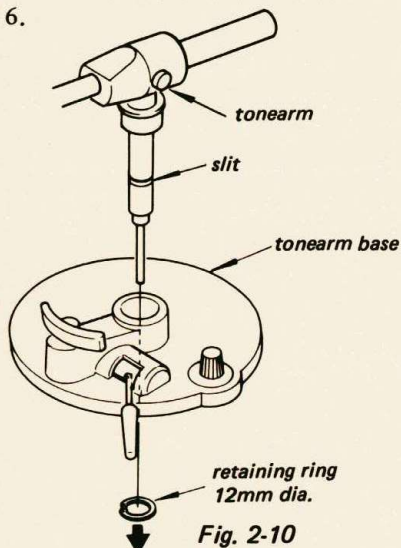


Fig. 2-15

2-7. TONEARM PIPE REMOVAL

1. Remove the tonearm as described in Procedure 2-6.
2. Remove the 12mm dia. retaining ring for taking off the tonearm as shown in Fig. 2-10.
3. Replace the pipe, the rubber for pipe and the connector as shown in Fig. 2-11.
4. Temporarily secure the pipe with two hexagonal screws and the screw B2.6 x 6 as shown in Fig. 2-11.
5. After replacing the new arm pipe, install the tonearm so that the three portions of A, B and C keep the same height as shown in Fig. 2-12.
6. Remove the tonearm again from the tonearm base. Fix two hexagonal screws and the screw B2.6 x 6.



2-8. COUNTERWEIGHT SHAFT REMOVAL

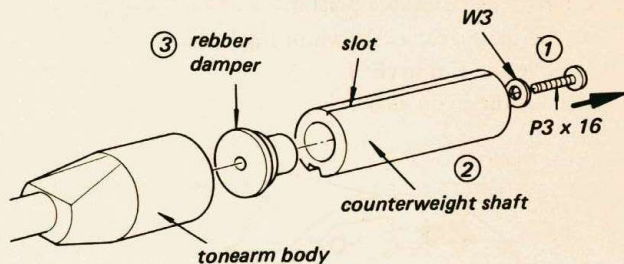


Fig. 2-13

Note: Install the shaft slot-side-up certainly.

2-9. LATERAL BALANCER REMOVAL

Loosen the lateral balance nut at first, and then remove the lateral balance shaft.

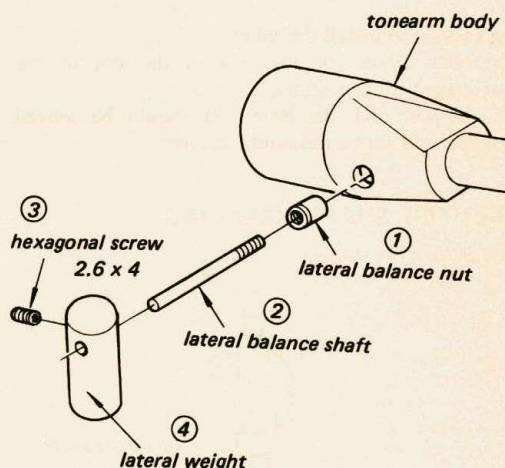


Fig. 2-14

Note: The lateral balance shaft should be jut out a few inches from the lateral weight. Also, keep the lateral weight right angle against the tonearm body as shown below.

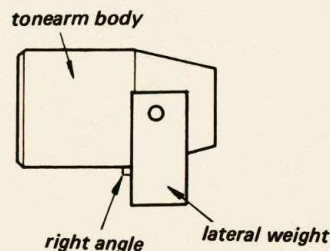


Fig. 2-15

2-10. MAIN GEAR REMOVAL

1. Remove the turntable platter.
2. Set the main gear as shown in Fig. 2-16.
3. Remove the E-ring (E5)
4. Replace the main gear.

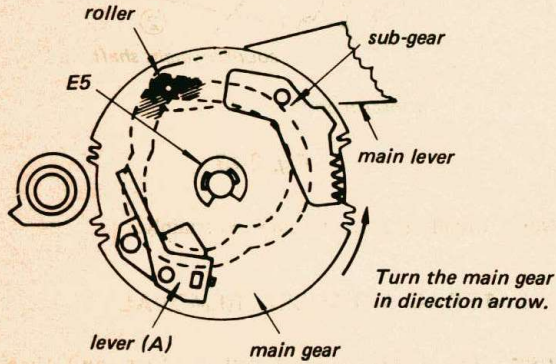


Fig. 2-16

Note:

- o Don't forget to install the roller.
- o The roller should be geared with the slot of the heart-shaped cam accurately.
- o The sub-gear and the lever (A) should be moved smoothly and kept a horizontal motion.

2-11. CENTER SHAFT REMOVAL

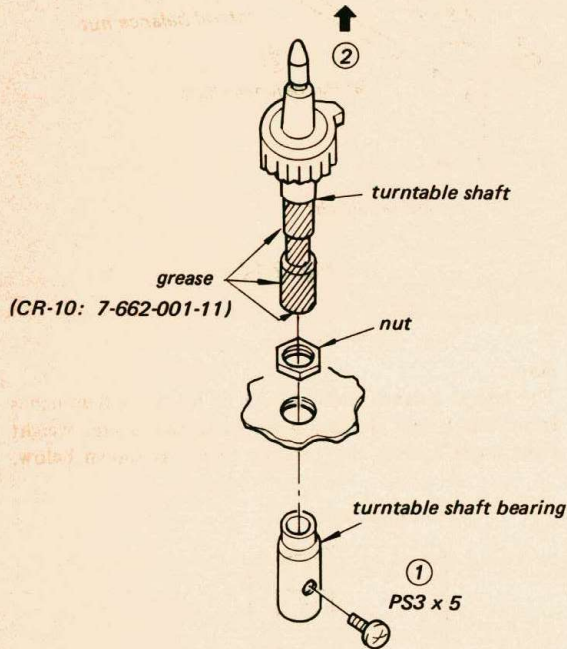


Fig. 2-17

Note:

- o When installing, lubricate the turntable shaft with grease.

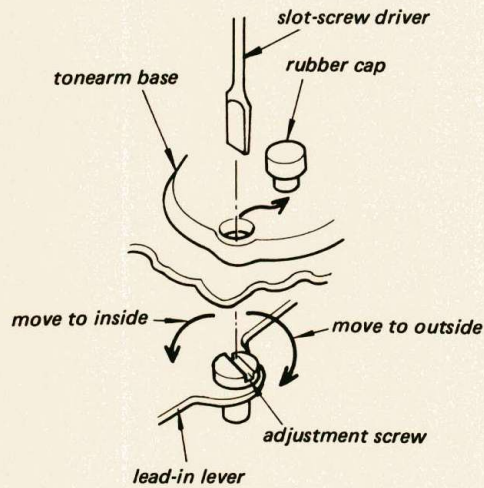
2-12. TURNTABLE SHAFT BEARING

1. Remove the turntable shaft.
2. Remove the nut as shown in Fig. 2-17.
3. Replace the turntable shaft bearing.

SECTION 3 ADJUSTMENT

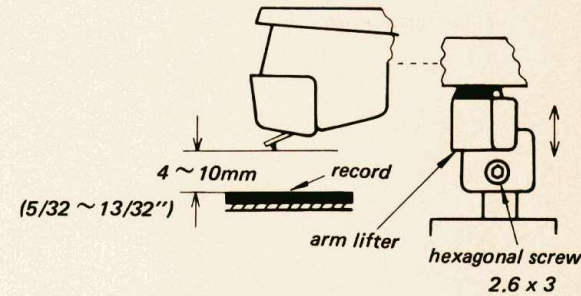
ONEARM LEAD-IN POSITION ADJUSTMENT

Remove the rubber cap on the tonearm base. Adjust the adjustment screw for the tonearm lead-in lever with a slot-screwdriver so that the stylus lowers correctly on the record at fully automatic operation.



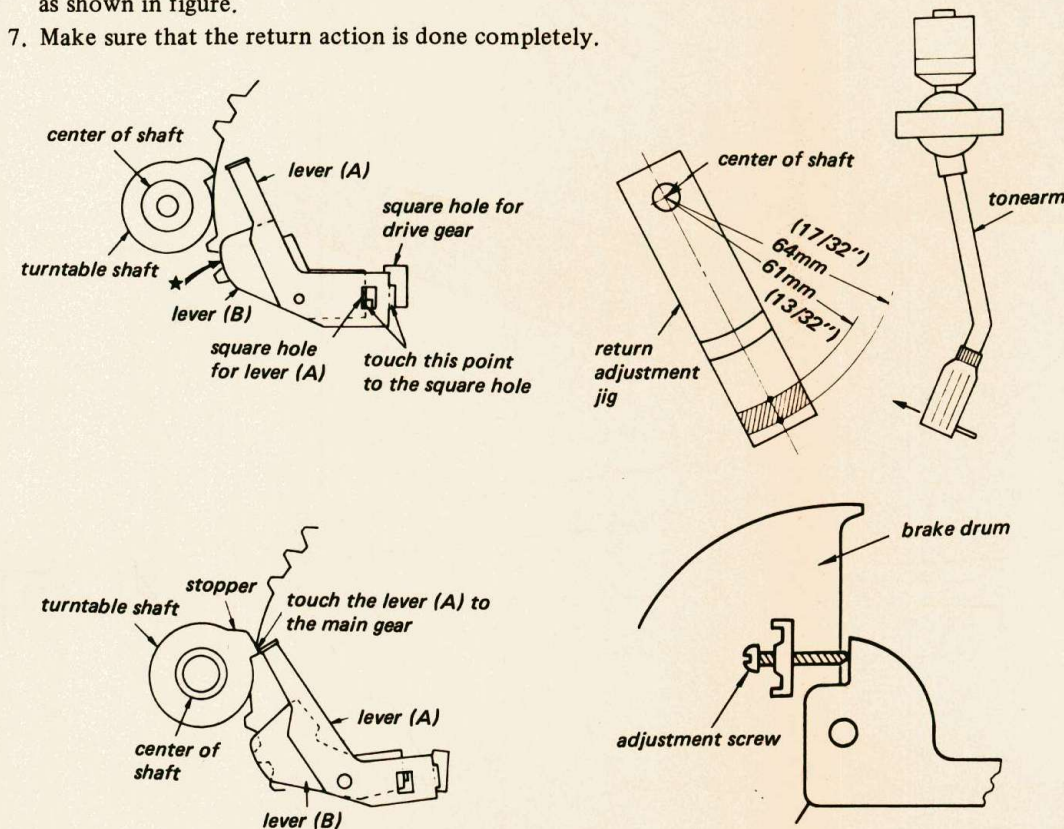
TONEARM HEIGHT ADJUSTMENT

When the tonearm is lifted up with the arm lifter at manual operation, adjust the hexagonal screw as shown below.



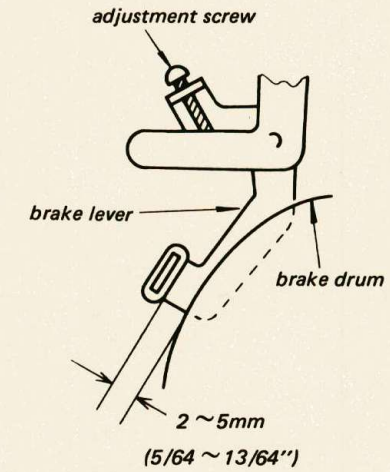
AUTOMATIC RETURN POSITION ADJUSTMENT

1. Remove the turntable platter mat and the turntable platter.
2. Put the tonearm on the arm rest.
3. Disconnect the power cord, then set the REPEAT, START/STOP control to START/STOP position. Turn the turntable shaft clockwise, engage the main gear with the turntable shaft. Then, turn the main gear once to detach it from the turntable shaft.
4. Set the lever (B) in direction arrow marked ★.
5. Fit the return adjustment jig (Part Number 9-911-814-01) in the turntable shaft.
6. Adjust the automatic return position adjustment screw so that the stylus position is 61 to 64mm on the return adjustment jig when the tip of lever (A) touches the turntable shaft as shown in figure.
7. Make sure that the return action is done completely.



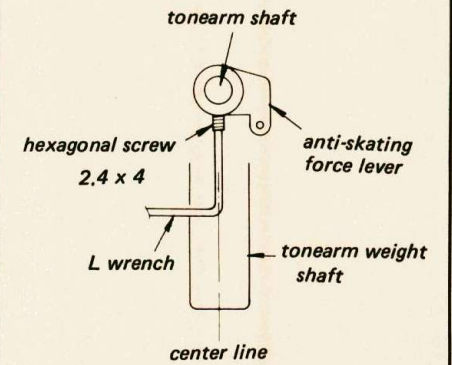
BRAKE LEVER ADJUSTMENT

Set the size selector lever to MANUAL. Adjust the adjustment screw as shown below at stop mode.



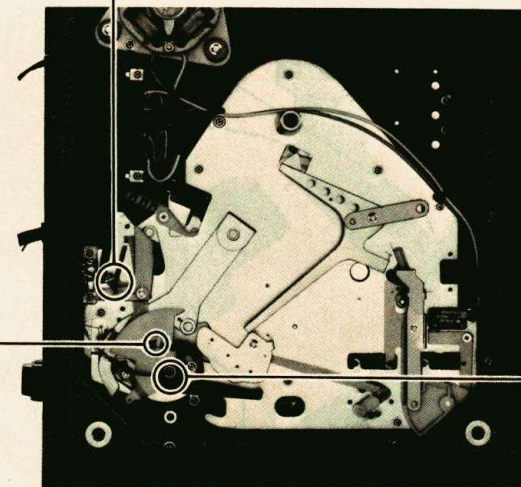
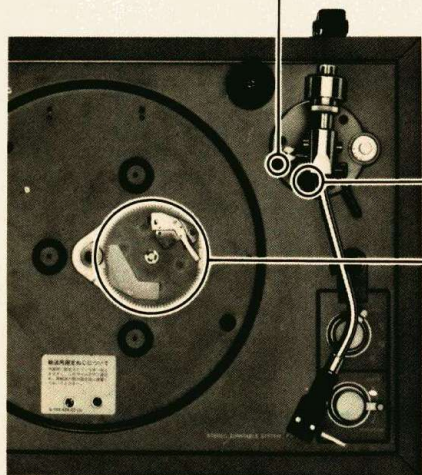
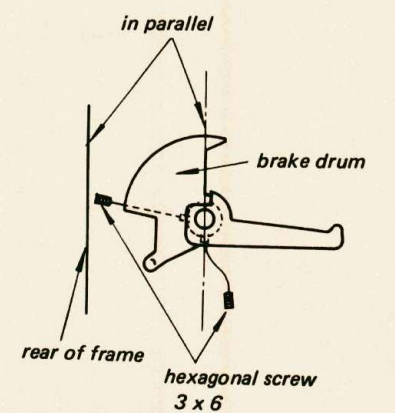
ANTI-SKATING FORCE COMPENSATOR ADJUSTMENT

Fix the hexagonal screw so that L wrench goes along the center line on the tonearm weight shaft as shown below.



BRAKE DRUM POSITION ADJUSTMENT

Adjust the hexagonal screw as shown below when the tonearm puts on the arm rest.

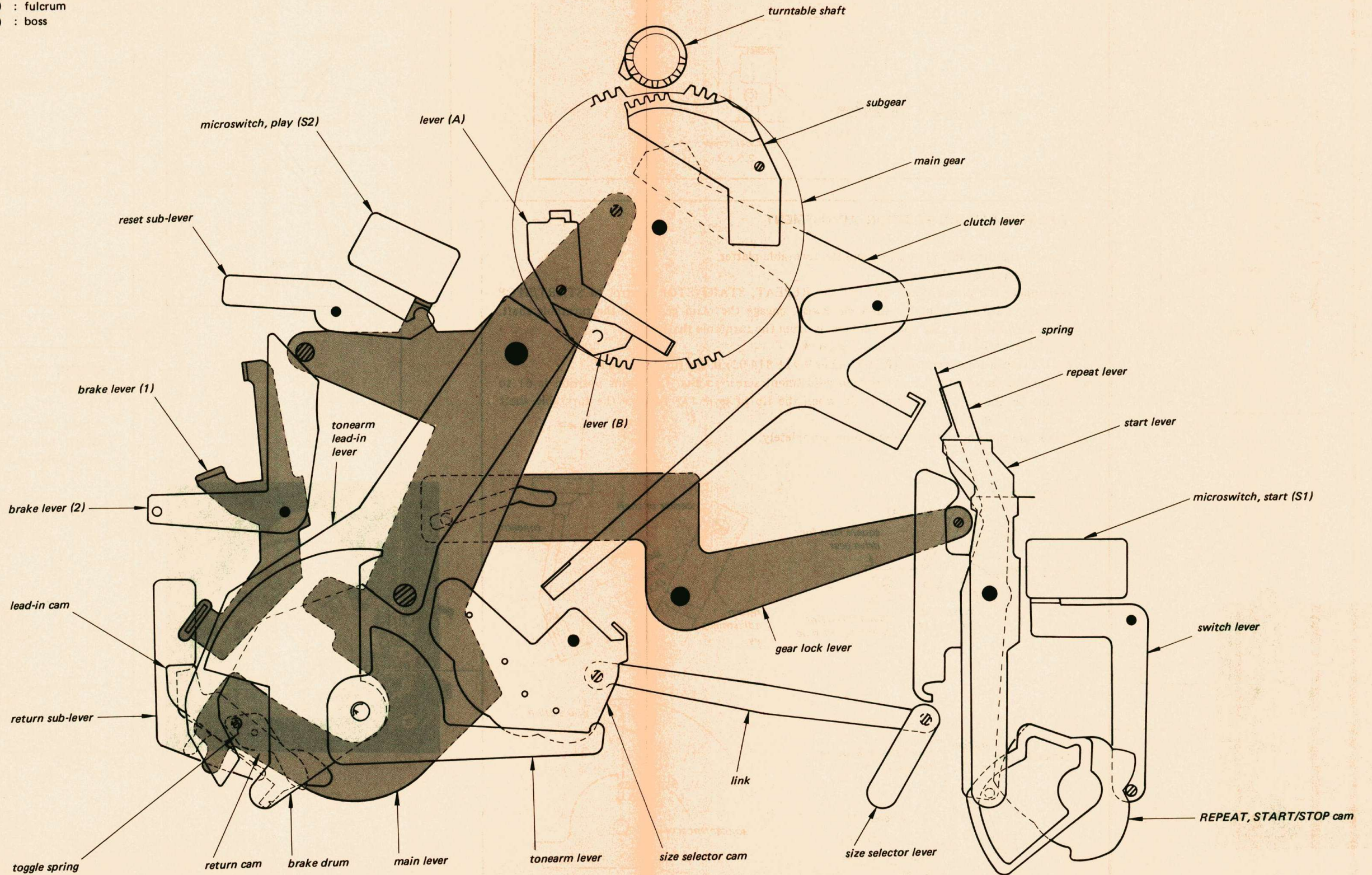


SECTION 4 MECHANICAL OPERATION

4-1. AUTOMATIC OPERATION MECHANISM

Note:

- The size selector lever positions to MANUAL.
- The REPEAT, START/STOP lever is released.
- The tonearm positions on the tonearm rest.
- ● : fulcrum
- ⊘ : boss

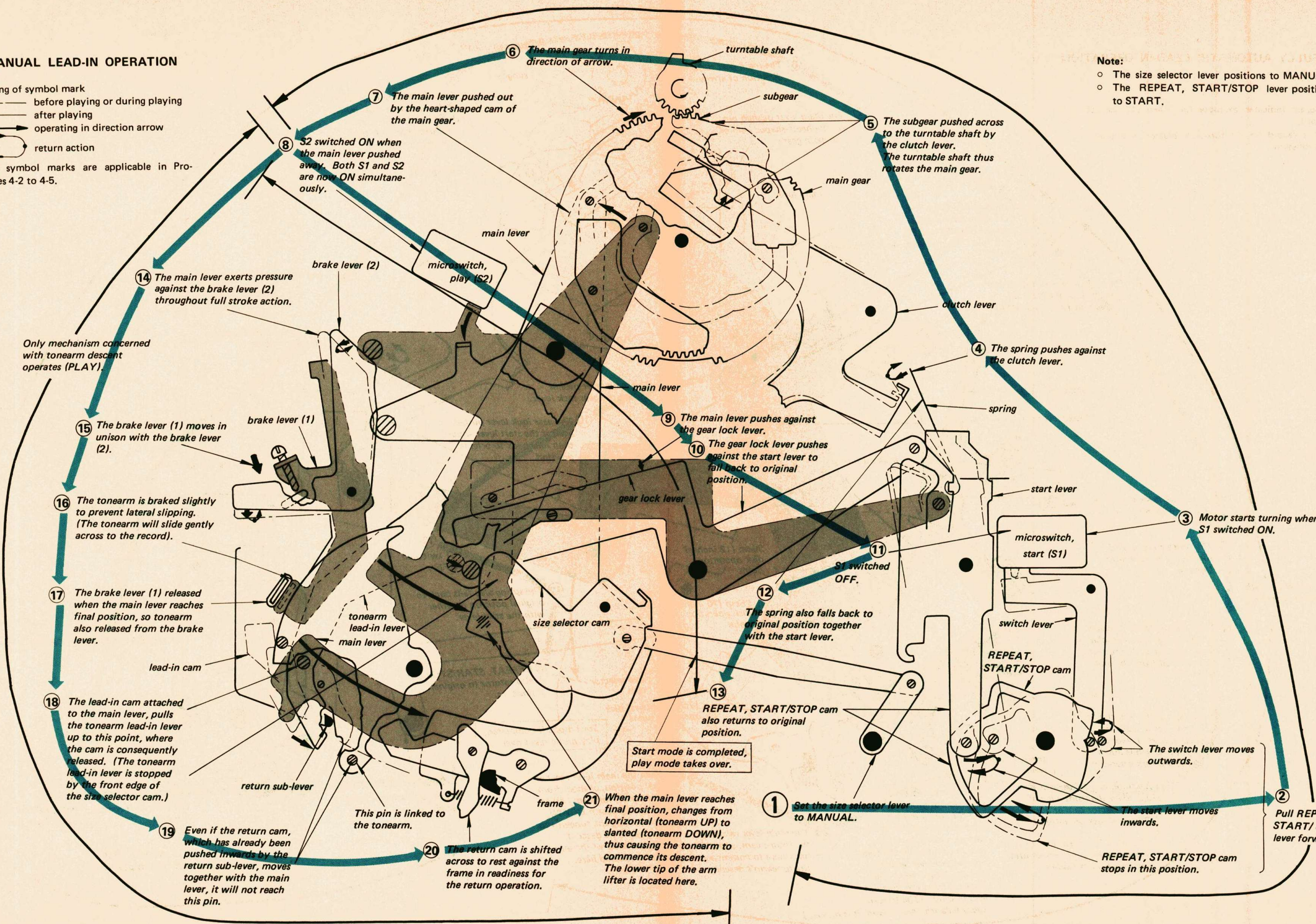


4-2. MANUAL LEAD-IN OPERATION

- o Meaning of symbol mark
 - before playing or during playing
 - after playing
 - operating in direction arrow
 - ↶ return action
- These symbol marks are applicable in Procedures 4-2 to 4-5.

Note:

- o The size selector lever positions to MANUAL.
- o The REPEAT, START/STOP lever positions to START.



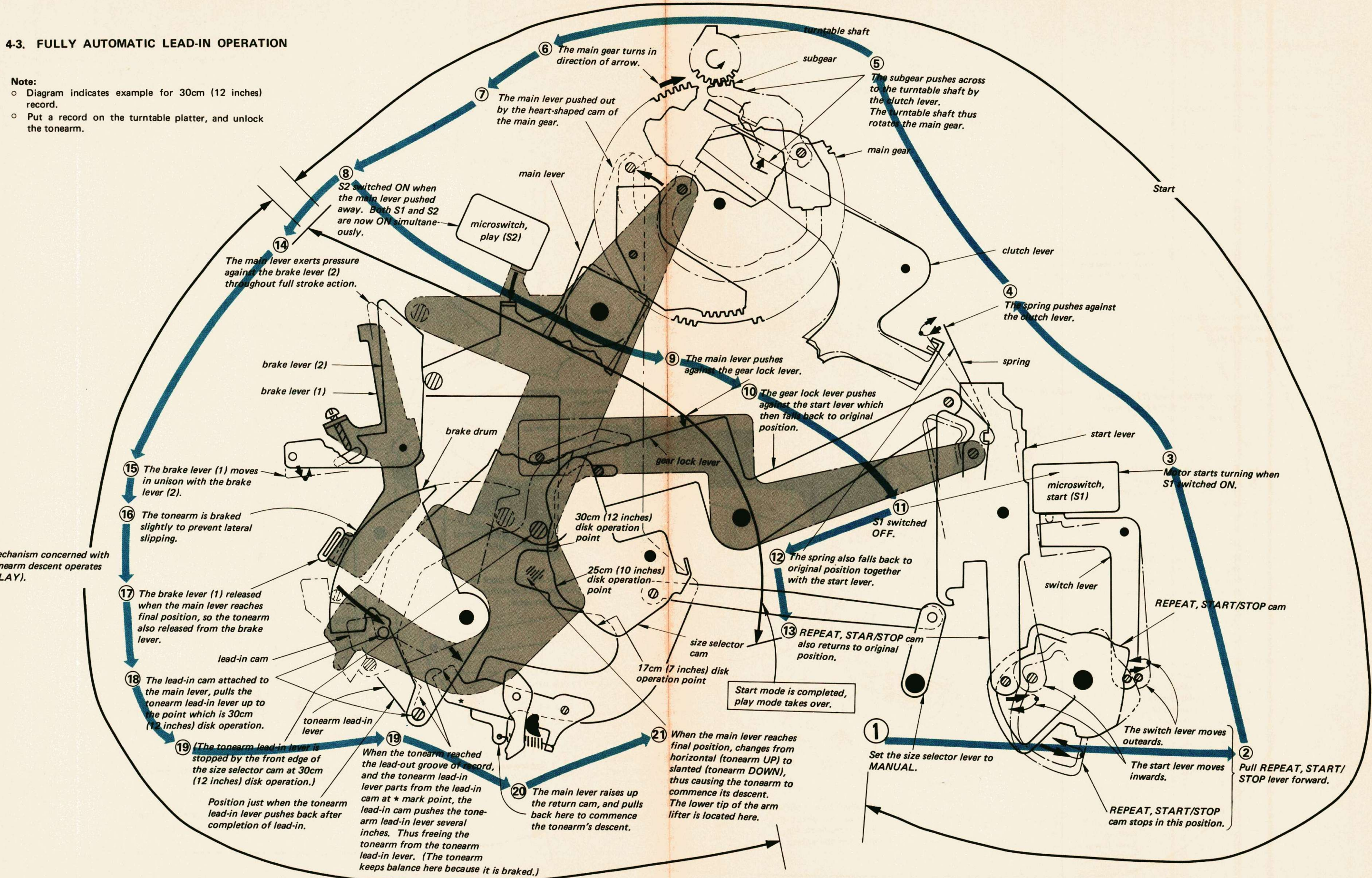
Only mechanism concerned with tonearm descent operates (PLAY).

Start mode is completed, play mode takes over.

4-3. FULLY AUTOMATIC LEAD-IN OPERATION

Note:

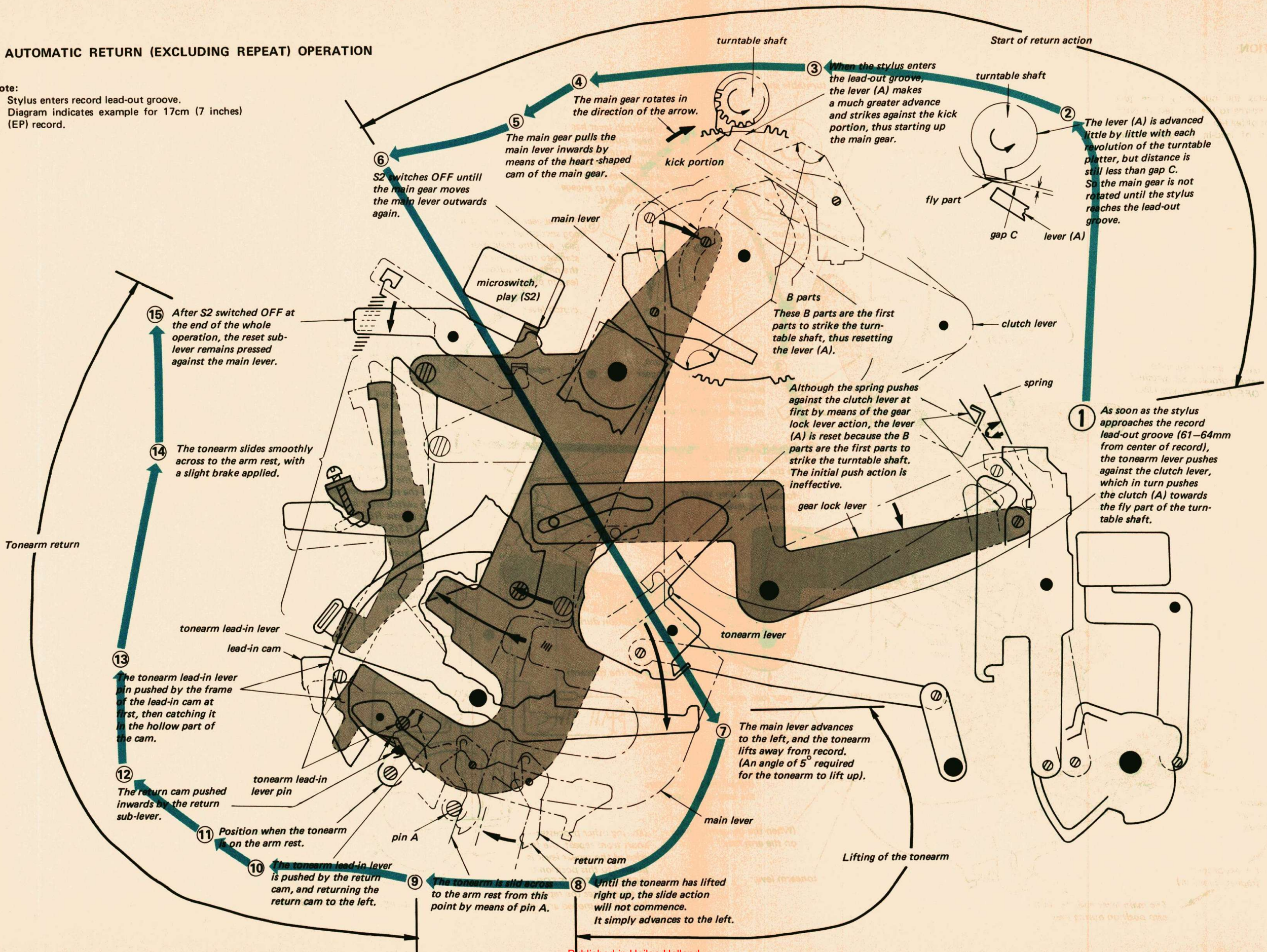
- o Diagram indicates example for 30cm (12 inches) record.
- o Put a record on the turntable platter, and unlock the tonearm.



4-4. AUTOMATIC RETURN (EXCLUDING REPEAT) OPERATION

Note:

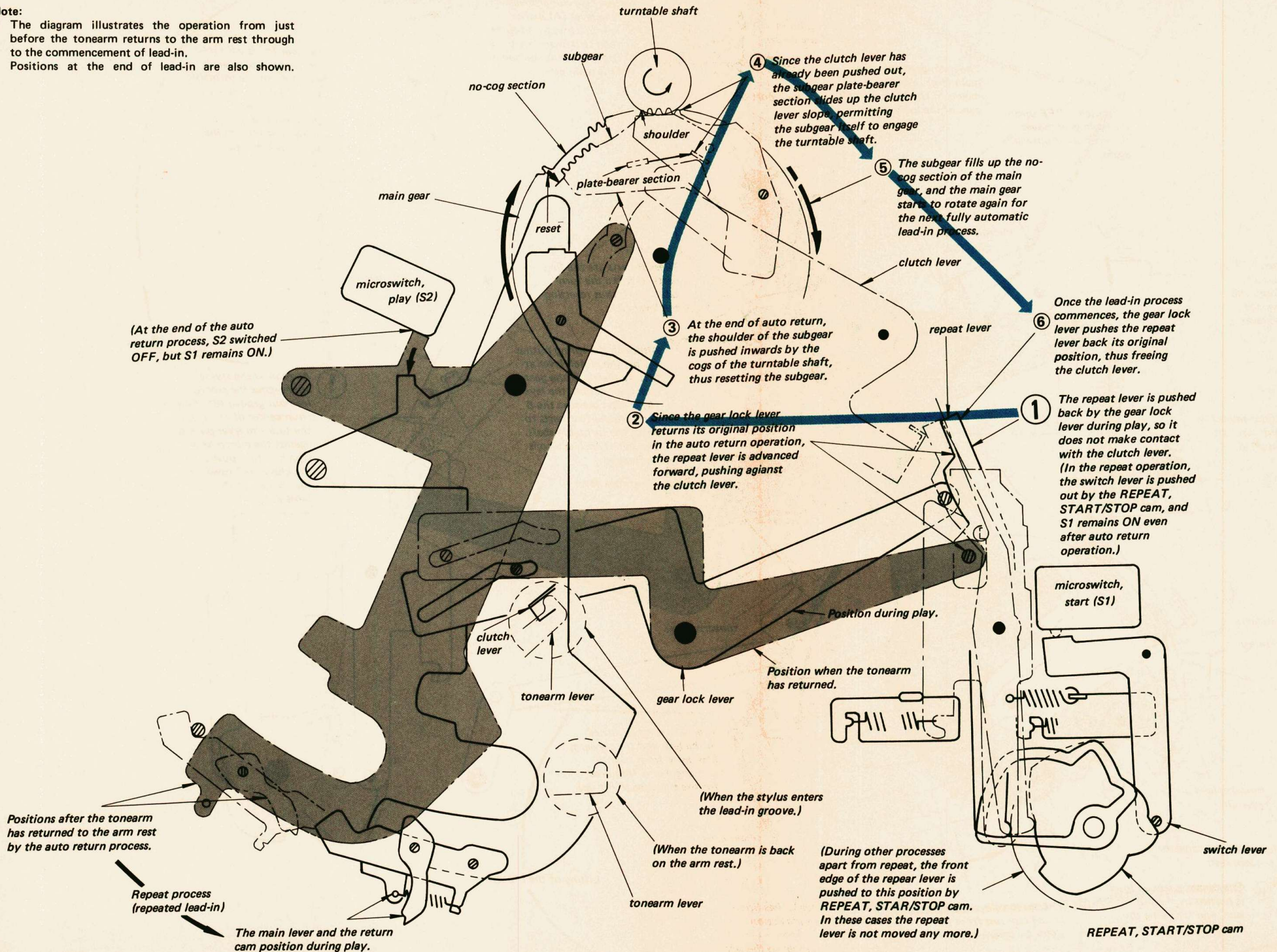
- Stylus enters record lead-out groove.
- Diagram indicates example for 17cm (7 inches) (EP) record.



4-5. REPEAT OPERATION

Note:

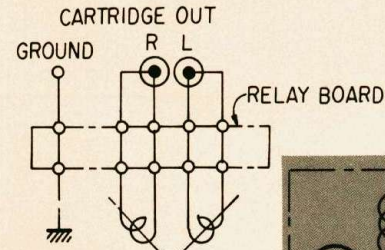
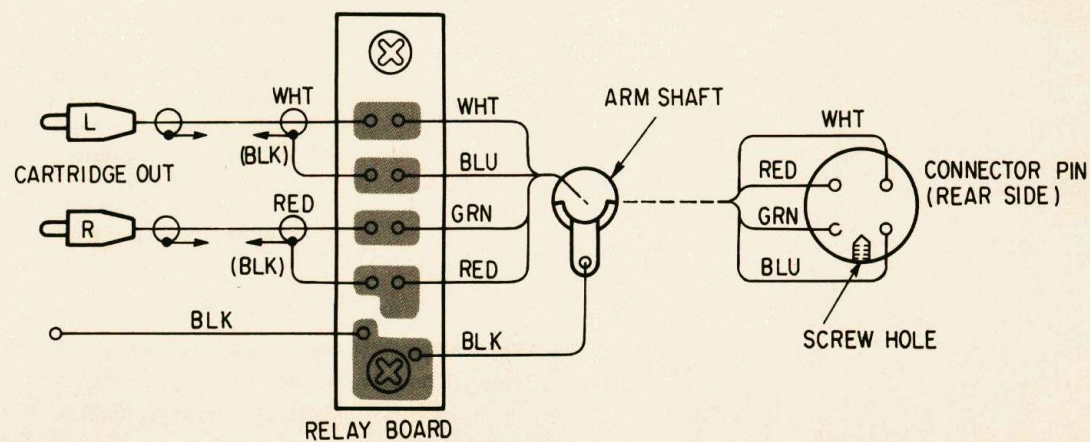
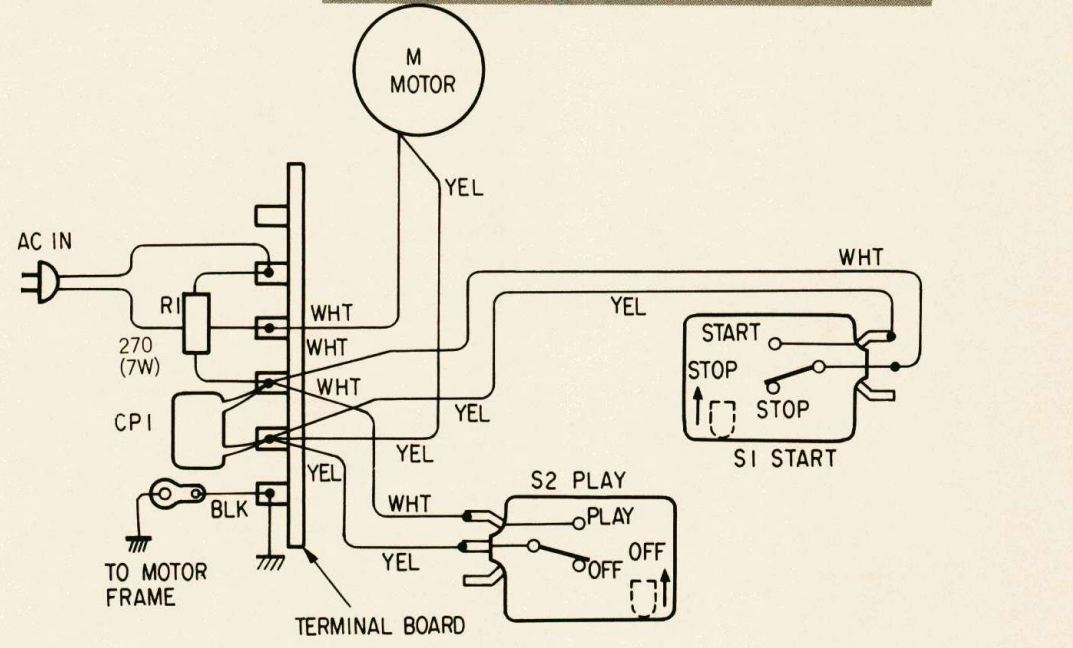
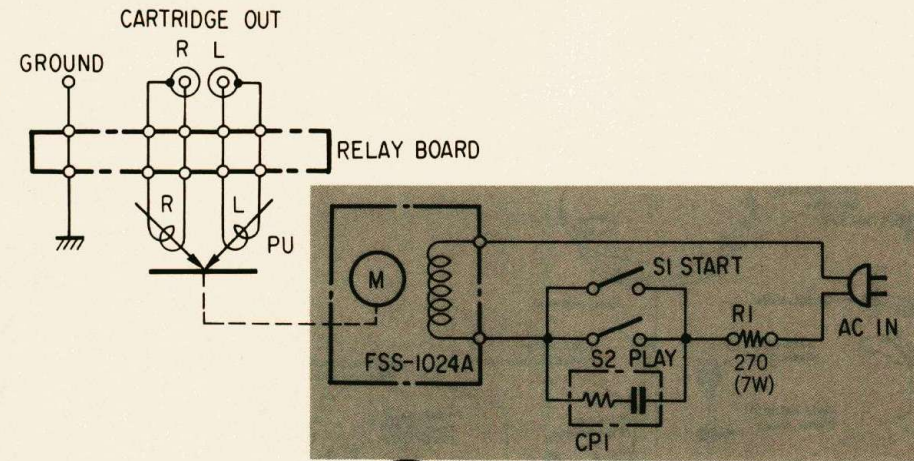
- The diagram illustrates the operation from just before the tonearm returns to the arm rest through to the commencement of lead-in. Positions at the end of lead-in are also shown.



SECTION 5
DIAGRAMS

US model
Canadian model

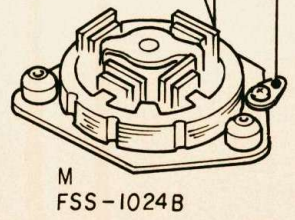
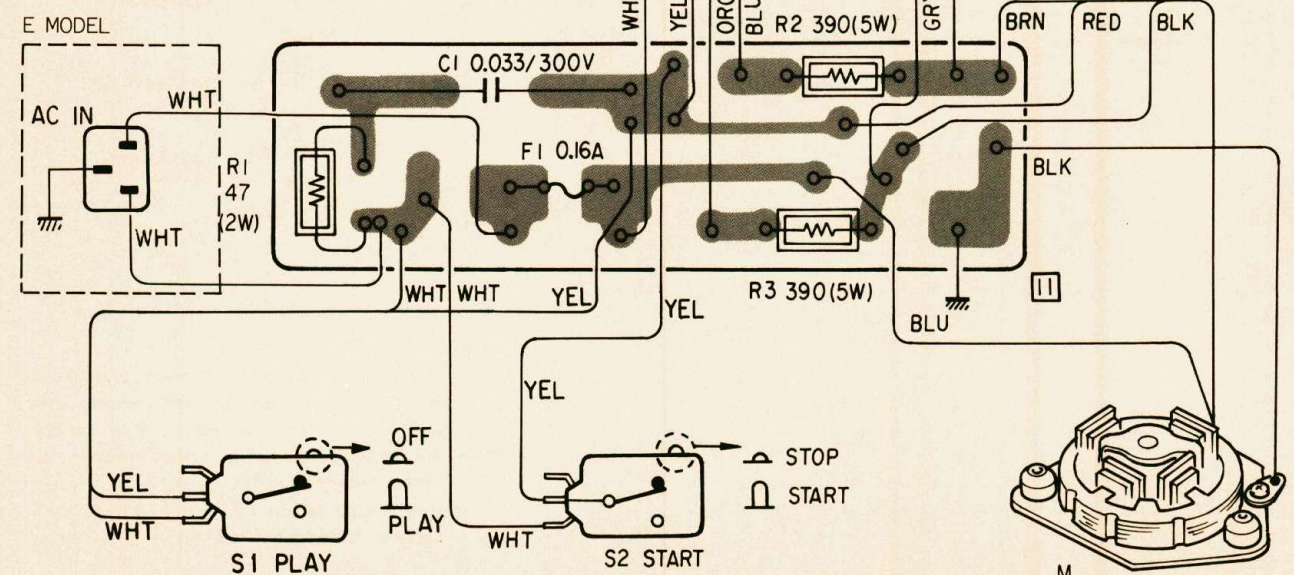
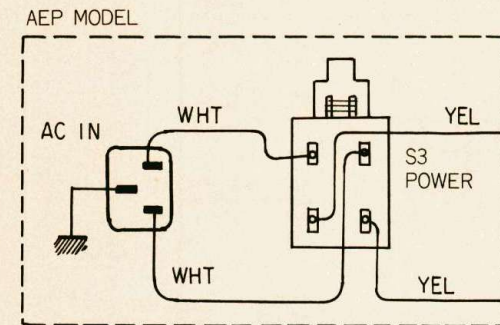
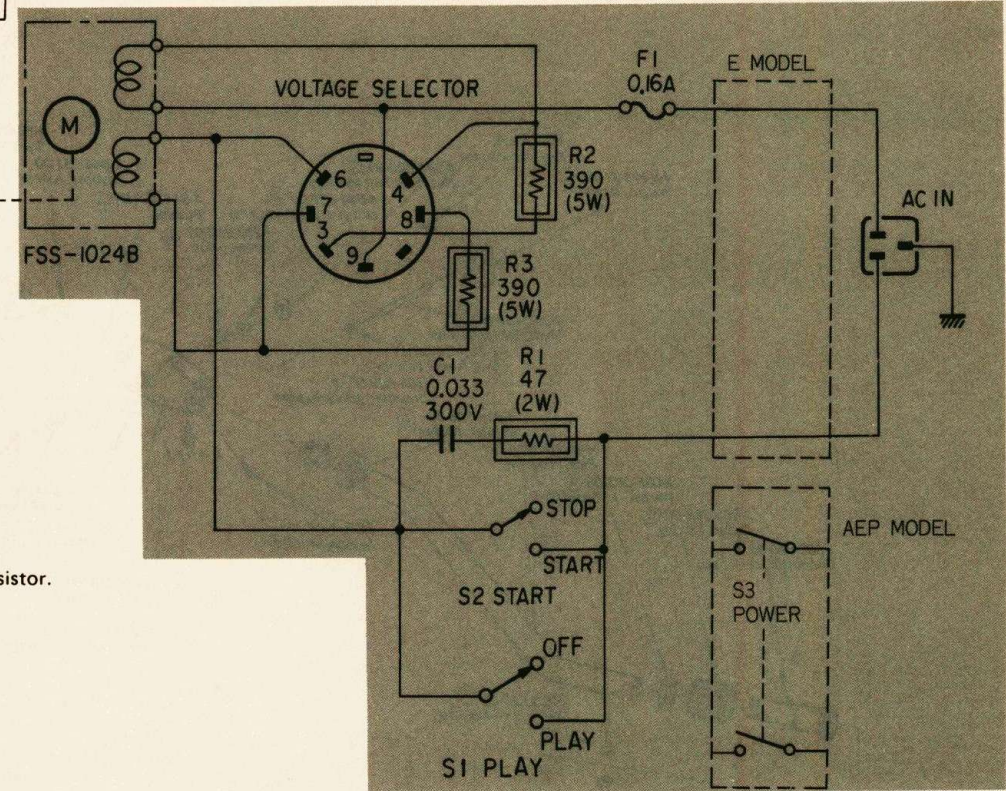
Note: The components identified by shading are critical for safety. Replace only with part number specified.



Note: The components identified by shading are critical for safety. Replace only with part number specified.

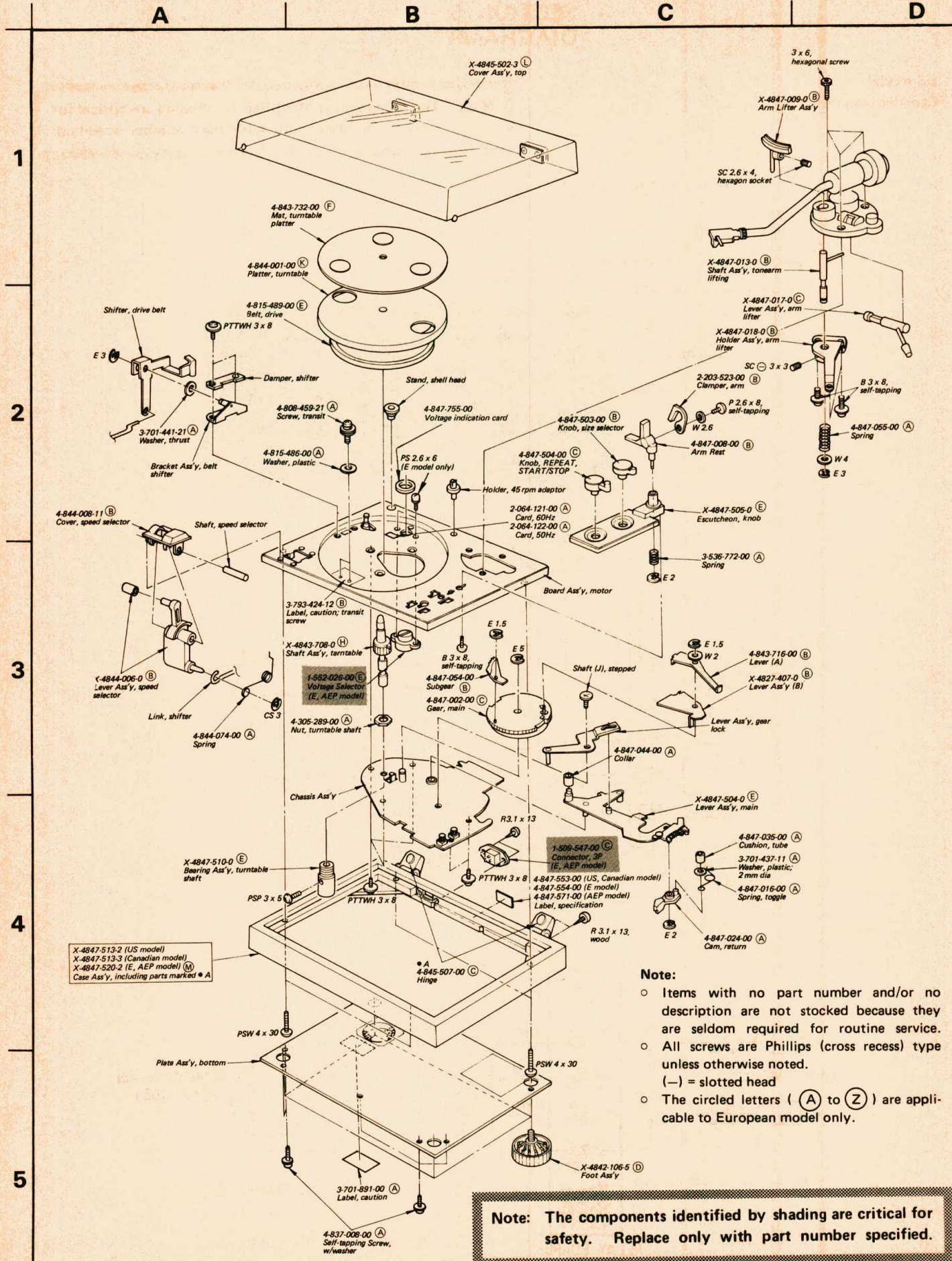
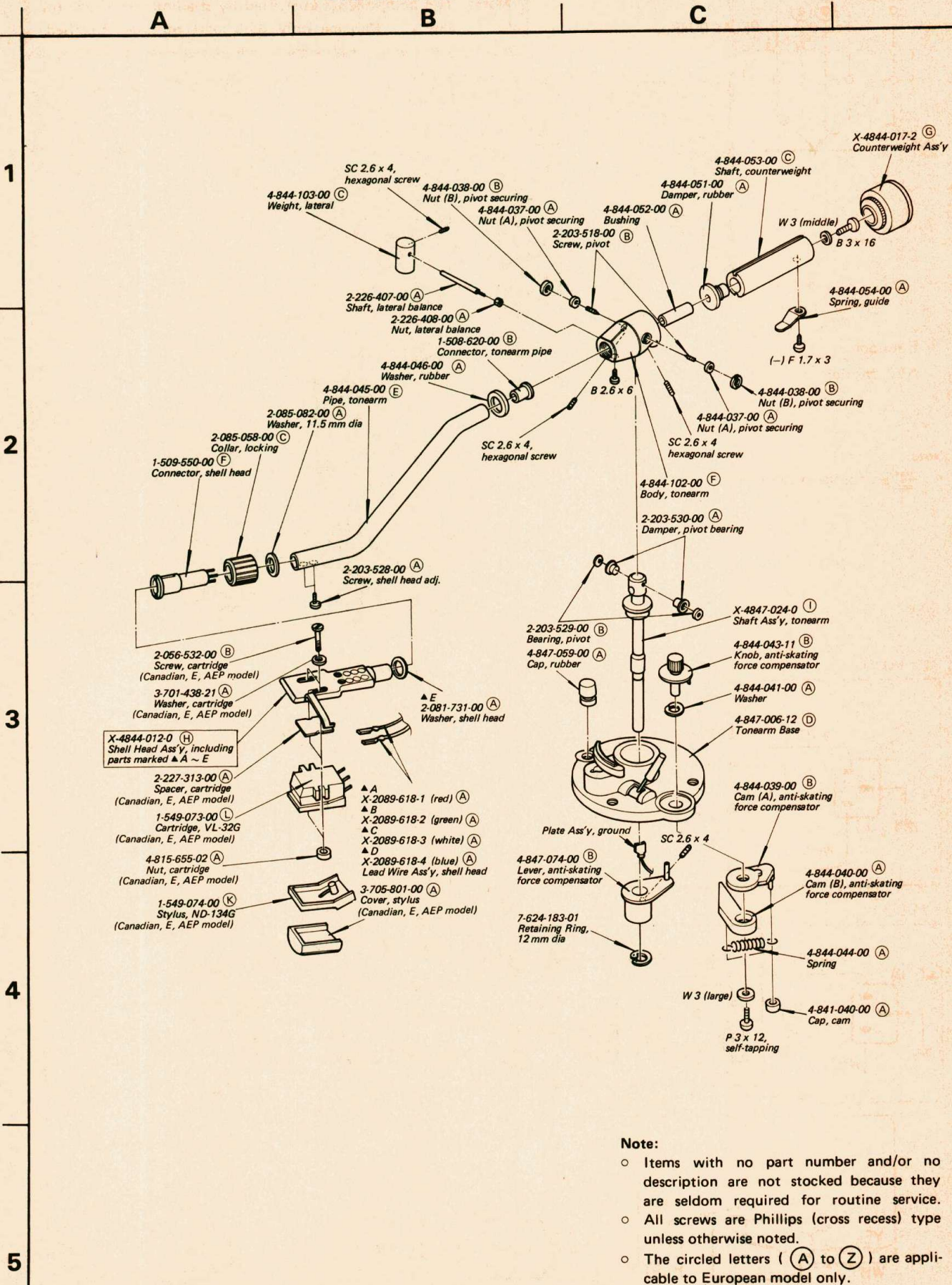
E model
AEP model

Note:
• : nonflammable resistor.



M
FSS-1024B

SECTION 6
EXPLODED VIEW



SECTION 7 ELECTRICAL PART LIST

Note: The circled letters (A to Z) are applicable to European model only.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
C1	1-108-750-62	0.033μF mylar (E, AEP model)
CP1	1-101-534-31	Encapsulated Component (US, Canadian model)
M	8-839-000-11	Motor, FSS-1024A (US, Canadian model)
	8-839-002-00	(L) Motor, FSS-1024B (E, AEP model)
R1	1-214-083-11	270 7W metal-oxide (US, Canadian model)
	1-217-220-11	(B) 47 2W wirewound (nonflammable) (E, AEP model)
R2	1-217-317-11	(B) 390 5W wirewound (nonflammable) (E, AEP model)
R3	1-217-317-11	(B) 390 5W wirewound (nonflammable) (E, AEP model)
S1, 2	1-516-028-XX	(F) Microswitch, start, play
S3	1-516-855-00	Switch, push: POWER (AEP model)
	1-508-620-00	(B) Connector, tonearm pipe
	1-509-547-00	(C) Connector, 3P (E, AEP model)
	1-509-550-00	(F) Connector, shell head
F1	1-532-079-00	(B) Fuse, 0.16A (E, AEP model)
	1-534-526-XX	Cord, power (US, Canadian model)
	1-536-324-00	Terminal Board (US, Canadian model)
	1-549-073-00	(L) Cartridge, VL-32G (Canadian, E, AEP model)
	1-549-074-00	(K) Stylus, ND-134G (Canadian, E, AEP model)
	1-551-063-00	(F) Cord, phono
	1-552-026-00	(E) Voltage Selector (E, AEP model)

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X-4847-522-0	(E) Carton Ass'y
1-551-216-00	Cord, power (E model)
2-054-619-00	(A) Spacer, cartridge
2-054-624-00	Screw (large), cartridge (US model)
2-054-625-00	Screw (small), cartridge (US model)
2-227-313-00	Spacer, cartridge (US model)
2-064-121-00	Card, 60Hz
2-064-122-00	Card, 50Hz
3-701-438-21	Washer, plastic; 2.5mm dia (US model)
3-701-630-00	(A) Bag, plastic; instruction manual

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
	3-701-806-01	(A) Adaptor, 45 rpm
	3-780-973-11	(B) Manual, instruction (E, AEP model)
	3-780-973-21	Manual, instruction (US model)
	3-780-973-21	Manual, instruction (Canadian model)
	3-794-030-31	
	3-793-395-00	(B) Gauge, overhang adjustment
	4-815-655-01	Nut, cartridge (US model)
	4-834-105-00	(A) Sheet, plastic
	4-838-319-01	Screw (middle), cartridge (US model)
	4-843-577-00	(A) Sheet, top cover
	4-844-059-00	(B) Bag, plastic; platter turntable
	4-844-060-00	(C) Bag, plastic; unit
	4-847-092-00	(C) Screwdriver
	4-847-565-00	(C) Cushion, bottom
	4-847-566-00	(C) Cardboard
	4-847-568-00	(F) Carton
	4-847-569-00	(C) Cushion, side
	4-847-542-00	(B) Cushion, platter turntable
	9-911-851-XX	(E) Cushion, tonearm pipe (t3)

Note: The components identified by shading are critical for safety. Replace only with part number specified.

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